Programming on the TI – Slope Formula

You are going to create a formula program on your calculator. **When done, it should look exactly like the one shown.** If you make any mistakes as you go, just move the cursor around to make changes in any spot you wish.

1. To begin, press "PRGM", move cursor over to the "NEW" menu, and press ENTER. You are now in a place called Program Edit.
2. The first (naming) line of the program appears. The cursor is in "Alpha-lock", so you do NOT need to hit the alpha key to type the word slope. Just hit the keys for S-L-O-P-E, and press enter (cursor should drop to the next command line).
3. To enter the "ClrHome" command, press PRGM. While you are in Program Edit, pressing the PRGM key again exposes 3 menus of commands. "ClrHome" is in the menu called "I/O" - the 8th in that list. Move the cursor to shade the number 8 next to it and press ENTER. Press ENTER again to drop to the next line.
4. The display ("Disp") command is in the "I/O" menu, also. Enter it.
5. The " is the alpha or blue function of the + key. Press the alpha key, then the + key.
6. To type the word "POINTS", press alpha before you press the letter P, then alpha before the letter O, etc.
7. Press second math to get the = sign.
8. Parentheses are on their own keys just above the 8 and 9 keys. Comma is the key just above the 7 key. The space is found by pressing alpha zero. Press ENTER when done with this line to drop to the next.
9. The prompt command is in the "I/O" menu , the second command. Then enter the variables separated by commas, and ENTER to drop to next line.
10. Enter the last line and press ENTER. ►FRAC is option 1 in the math menu.
11. Go back to the home screen by pressing QUIT (2nd function of the MODE key).
12. Now, to RUN the program:
13. Press PRGM, but STAY in the EXEC mode. Scroll down to the program named slope (if you already have some loaded) and press ENTER. "prgmSLOPE" will appear in the home screen as a check, press ENTER to begin running it.
14. Try to find the slope of the line containing (2,5) and (-3,1). One of three things will happen:
    * 1. Your program will run perfectly, and display the correct slope (which is 4/5).
      2. You will get some sort of SYNTAX ERROR - meaning you typed in a command incorrectly. Choose GOTO to return right back to prgm edit and have the cursor blinking on the line where the error was made.
      3. The program runs, but gives the wrong slope. You entered the formula incorrectly. Press PRGM, then move to the EDIT menu, scroll down to SLOPE and press enter. Find your mistake and fix it.

15) Now run the program to find the slope of the line between (3,7) and (3,3). What kind of error do you get now? Why?